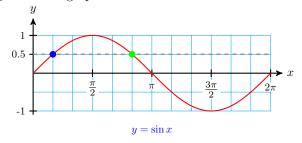
## Play with TikZ

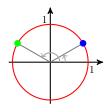
## Just Us

## December 12, 2018

## 1 Section 7.3

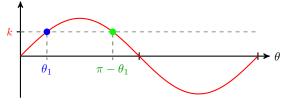
fig-7-3-1 sine graph and unit circle

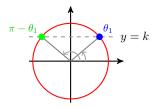




The unit circle

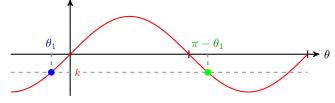
fig-7-3-3 sine graph and unit circle

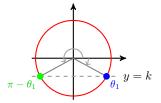




Solutions of  $\sin \theta = k$ , k > 0

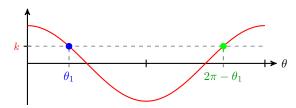
fig-7-3-4 sine graph and unit circle

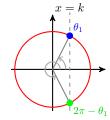




Solutions of  $\sin \theta = k, \quad k < 0$ 

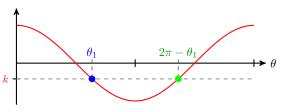
fig-7-3-5 cosine graph and unit circle

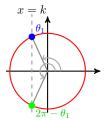




Solutions of  $\cos \theta = k$ , k > 0

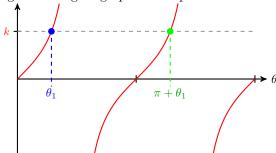
fig-7-3-6 cosine graph and unit circle

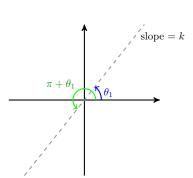




Solutions of  $\cos \theta = k$ , k < 0

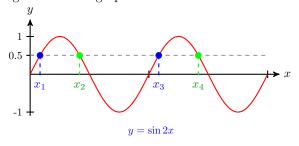
fig-7-3-7 tangent graph and slopes

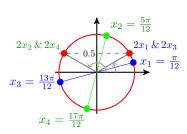




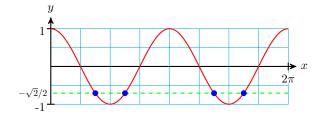
Solutions of  $\tan \theta = k$ ,

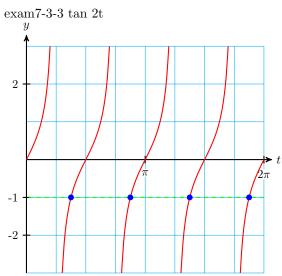
fig-7-3-8  $\sin 2x$  graph and unit circle

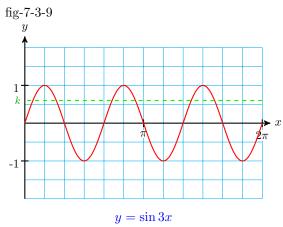




exer<br/>7-3-2ans a.k.a. ar<br/>7-3-2ans  $\,$ 

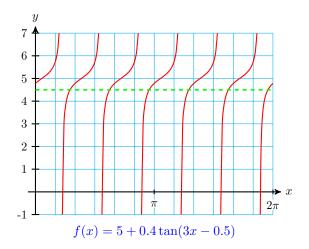




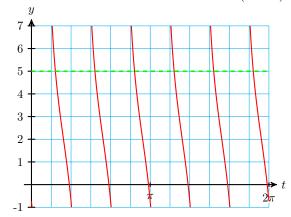


1 - k -1  $y = \sin 4x$ 

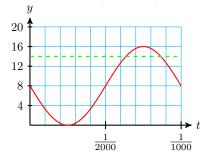
exam7-3-6  $5 + 0.4 \tan (3x-0.5)$ 



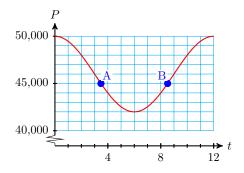
exer<br/>7-3-6ans a.k.a. ar<br/>7-3-6ans 2-4 tan  $3(\mathbf{x} + 0.2)$ 



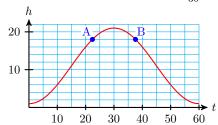
exam<br/>7-3-7 -8sin<br/>(2000 pi t) +8



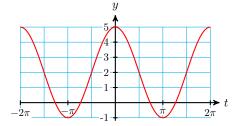
hp<br/>7-3-43ans  $P(t) = 4000\cos(\frac{\pi}{6}t) + 46,000$ 



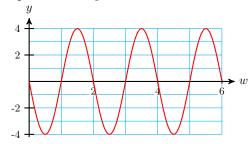
hp<br/>7-3-45ans  $h(t) = 11 - 10\cos(\frac{\pi}{30}t)$ 



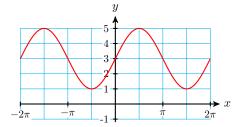
hp7-sum-5ans  $y = 2 + 3\cos t$ 



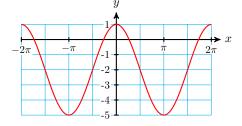
hp7-sum-7ans  $y = -4\sin \pi w$ 



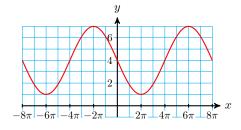
hp7-sum-9  $y = 3 + 2\sin x$ 

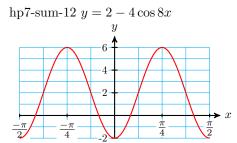


hp7-sum-10  $y = -2 + 3\cos x$ 

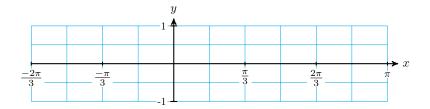


hp7-sum-11  $y = 4 - 3\sin\frac{x}{4}$ 

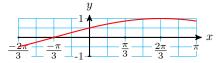




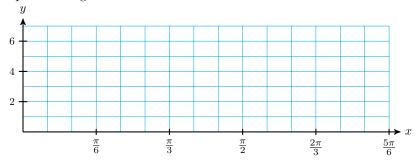
hp7-sum-13 grid



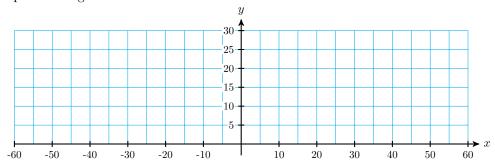
hp7-sum-13ans  $y = \sin\left(\frac{x}{2} + \frac{\pi}{6}\right)$ 



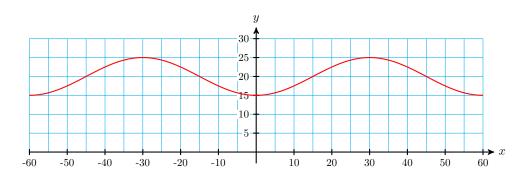
hp7-sum-14 grid



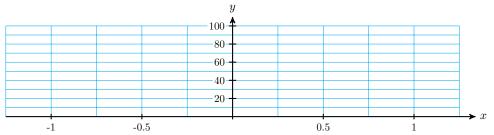
hp7-sum-15 grid



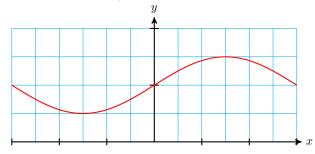
hp7-sum-15 and  $20-5\cos\left(\frac{\pi}{30}x\right)$ 



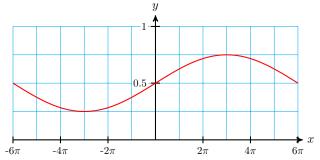
hp7-sum-16 grid



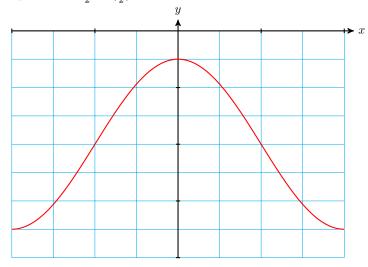
hp7-sum-17  $\frac{1}{4}\sin(\frac{x}{6}) + \frac{1}{2}$ 



hp7-sum-17ans  $\frac{1}{4}\sin(\frac{x}{6}) + \frac{1}{2}$ 



hp7-sum-18  $\frac{3}{2}\cos(\frac{x}{2}) - 2$ 



hp7-sum-19ans  $y = -5\cos(2x - 0.5) + 3$ 

